

ABSTRACT

Methods and apparatus are provided for performing a chemical-mechanical process on a workpiece surface. The apparatus includes a platen having a top surface and at least one inlet configured to receive a polishing fluid, a plurality of holes formed in the top surface, a manifold system in fluid communication with the at least one inlet and each of the holes, a controller adapted to supply valve command signals, and a plurality of valves, each valve being disposed in one of the holes and coupled to the controller to receive the valve command signals and being operable, in response thereto, to selectively move between an open and a closed position. The method includes the steps of supplying the valve command signals, and selectively opening and closing the valves in response to the valve command signals.